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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,038	10/07/2003	Ann Brazil	50694/RAW/B817	2722
23363	7590 08/26/2004		EXAMINER	
CHRISTIE, PARKER & HALE, LLP PO BOX 7068			ROVNAK, JOHN EDMUND	
PASADENA, CA 91109-7068			ART UNIT	PAPER NUMBER
,			3714	<u> </u>
			DATE MAIL ED: 09/26/200	4

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	N
	10/681,038	BRAZIL, ANN	O.
Office Action Summary	Examiner	Art Unit	
	John E. Rovnak	3714	
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet w	th the correspondence addr	9SS
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a r - If NO period for reply is specified above, the maximum statutory perion - Failure to reply within the set or extended period for reply will, by state than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply within the statutory minimum of third will apply and will expire SIX (6) MON tute, cause the application to become AE	eply be timely filed by (30) days will be considered timely. THS from the mailing date of this com- NANDONED (35 U.S.C. § 133).	munication.
Status			
1) Responsive to communication(s) filed on <u>07</u>	October 2003.		
· · · · · · · · · · · · · · · · · · ·	his action is non-final.		
3) Since this application is in condition for allow		ers, prosecution as to the n	nerits is
closed in accordance with the practice unde	•	•	
Disposition of Claims			
4) ☐ Claim(s) 1-9 is/are pending in the application 4a) Of the above claim(s) is/are withd 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-9 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.		
Application Papers			
9)☐ The specification is objected to by the Exami 10)☒ The drawing(s) filed on <u>07 October 2003</u> is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction. The oath or declaration is objected to by the	re: a)⊠ accepted or b)⊡ o ne drawing(s) be held in abeyar ection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR	1.121(d).
Priority under 35 U.S.C. § 119			
a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a li	ents have been received. ents have been received in A riority documents have been eau (PCT Rule 17.2(a)).	pplication No received in this National St	age
Attachment(s)			
1) X Notice of References Cited (PTO-892)		ummary (PTO-413)	
2)	—	s)/Mail Date nformal Patent Application (PTO-1	52)
Paper No(s)/Mail Date	6) Other:		,

Art Unit: 3714

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are not limited to the technological arts. The presentation could be performed by a human.

Regarding the requirement under 35 U.S.C. § 101 that a claimed invention be limited to the technological arts in order to be deemed statutory, the Examiner submits that the phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts." See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts."

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature," "natural phenomena," and "abstract ideas." See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998). This addresses the second test under 35 U.S.C § 101 of whether or not an invention is eligible for a patent. The Manual of Patent Examining

Art Unit: 3714

Procedure reiterates this point. More specifically, MPEP § 2106(II)(A) states, "The claimed invention as a whole must accomplish a practical application. That is, it must produce a 'useful, concrete and tangible result.' *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02." Furthermore, "Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101." (MPEP § 2106(II)(A))

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts." The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art"

Art Unit: 3714

because the claimed invention was an operation being performed by a computer within a computer.

The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result." See State Street Bank & Trust Co. at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §\$102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of these analyses go towards whether the claimed invention is non-statutory because of the presence of an abstract idea. State Street never addressed the first part of the analysis, i.e., the "technological arts" test established in Toma because the invention in State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences in affirming a §101 rejection finding the claimed invention to be nonArt Unit: 3714

statutory for failing the technological arts test. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

What is indeed important to note in the *Bowman* decision is that the Board acknowledged the dichotomy of the analysis of the claims under 35 U.S.C. § 101, thereby emphasizing the fact that not only must the claimed invention produce a "useful, concrete and tangible result," *but that it must also be limited to the technological arts* in order to be deemed statutory under the guidelines of 35 U.S.C. § 101. The Board very explicitly set forth this point:

[1] We agree with the examiner. Appellant has carefully avoided tying the disclosed and claimed invention to any technological art or environment. As noted by the examiner, the disclosed and claimed invention is directed to nothing more than a human making mental computations and manually plotting the results on a paper chart [answer, page 5]. The Examination Guidelines for Computer-Related Inventions are not dispositive of this case because there is absolutely no indication on this record that the invention is connected to a computer in any manner.

Despite the express language of 35 U.S.C. §101, several judicially created exceptions have been excluded from subject matter covered by Section 101. These exceptions include laws of nature, natural phenomenon, and abstract ideas. See Diamond v. Diehr, 450 U.S. 175, 185, 209 USPQ 1, 7(1981). We interpret the examiner's rejection as finding that the claimed invention before us is nothing more than an abstract idea because it is not tied to any technological art or environment. Appellant's argument is that the physical (even manual) creation of a chart and the plotting of a point on this chart places the invention within the technological arts.

The phrase "technological arts" has been created to offer another view of the term "useful arts." The Constitution of the United States authorizes and empowers the government to issue patents only for inventions which promote the progress [of science and] the useful arts. We find that the

Art Unit: 3714

invention before us, as disclosed and claimed, does not promote the progress of science and the useful arts, and does not fall within the definition of technological arts. The abstract idea which forms the heart of the invention before us does not become a technological art merely by the recitation in the claim of "transforming physical media into a chart" [sic, drawing or creating a chart] and "physically plotting a point on said chart."

In summary, we find that the invention before us is nothing more than an abstract idea which is not tied to any technological art, environment, or machine, and is not a useful art as contemplated by the Constitution of the United States. The physical aspects of claim 1, which are disclosed to be nothing more than a human manually drawing a chart and plotting points on this chart, do not automatically bring the claimed invention within the technological arts. For all these reasons just discussed, we sustain the examiner's rejection of the appealed claims under 35 U.S.C. §101. See Ex parte Bowman, 61 USPQ2d (BNA) 1669, 1671 (BdPatApp&Int 2001)

Similarly, in the present application, claims 1-9 are deemed to be non-statutory because they are not limited to the technological arts; all recited steps could be performed manually by a human, thereby reinforcing the fact that applicant's invention fails to "[p]romote the progress of science and useful arts," as intended by the United States Constitution under Art. I, §8, cl. 8 regarding patent protection.

In conclusion, the Examiner submits that applicant's claims do not meet the technological arts requirement under 35 U.S.C. § 101, as articulated in *Musgrave, Toma*, and *Bowman* as well as the Manual of Patent Examining Procedure.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sloane.

Sloane discloses selecting an educational presentation related to a problem behavior that could be exhibited by a child. The Time-out method was known in the art at the time of the invention as discussed in the background of the applicant's invention. It would have been obvious to one of ordinary skill in the art that the presence of the conventional authority figure (instructor) during a time-out period could be replaced by an automated instruction system as taught by Sloane for intervention in a child's behavior.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hersh discloses a presentation system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John E. Rovnak whose telephone number is (703) 308-3087. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jessica Harrison can be reached on (703) 308-2217. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3714

9197 (toll-free).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-

John Rovnak Primary Examiner Art Unit 3714 Page 8
